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than one exit, provided the proximity of the exits allows unassisted verbal communication between seated flight attendants;

- (e) Is capable of operation within 10 seconds by a flight attendant at each of those stations in the passenger compartment from which its use is accessible;
- (f) Is audible at all passenger seats, lavatories, and flight attendant seats and work stations; and
- (g) For transport category airplanes manufactured on or after November 27, 1990, meets the requirements of §25.1423 of this chapter.

[Doc. No. 24995, 54 FR 43926, Oct. 27, 1989]

## § 121.319 Crewmember interphone system.

- (a) No person may operate an airplane with a seating capacity of more than 19 passengers unless the airplane is equipped with a crewmember interphone system that:
  - (1) [Reserved]
- (2) Is capable of operation independent of the public address system required by \$121.318(a) except for handsets, headsets, microphones, selector switches, and signaling devices; and
- (3) Meets the requirements of paragraph (b) of this section.
- (b) The crewmember interphone system required by paragraph (a) of this section must be approved in accordance with §21.305 of this chapter and meet the following requirements:
- (1) It must provide a means of twoway communication between the pilot compartment and—
- (i) Each passenger compartment; and (ii) Each galley located on other than
- the main passenger deck level.
  (2) It must be accessible for immediate use from each of two flight crewmember stations in the pilot compart-
- diate use from each of two flight crewmember stations in the pilot compartment;
  (3) It must be accessible for use from
- at least one normal flight attendant station in each passenger compartment;
- (4) It must be capable of operation within 10 seconds by a flight attendant at those stations in each passenger compartment from which its use is accessible; and
- (5) For large turbojet-powered airplanes:

- (i) It must be accessible for use at enough flight attendant stations so that all floor-level emergency exits (or entryways to those exits in the case of exits located within galleys) in each passenger compartment are observable from one or more of those stations so equipped;
- (ii) It must have an alerting system incorporating aural or visual signals for use by flight crewmembers to alert flight attendants and for use by flight attendants to alert flight crewmembers;
- (iii) The alerting system required by paragraph (b)(5)(ii) of this section must have a means for the recipient of a call to determine whether it is a normal call or an emergency call; and
- (iv) When the airplane is on the ground, it must provide a means of two-way communication between ground personnel and either of at least two flight crewmembers in the pilot compartment. The interphone system station for use by ground personnel must be so located that personnel using the system may avoid visible detection from within the airplane.

[Doc. No. 10865, 38 FR 21494, Aug. 9, 1973, as amended by Amdt. 121–121, 40 FR 42186, Sept. 11, 1975; Amdt. 121–149, 43 FR 50602, Oct. 30, 1978; Amdt. 121–178, 47 FR 13316, Mar. 29, 1982; Amdt. 121–253, 61 FR 2611, Jan. 26, 1996]

## §121.321 Operations in icing.

After October 21, 2013, no person may operate an airplane with a certificated maximum takeoff weight less than 60,000 pounds in conditions conducive to airframe icing unless it complies with this section. As used in this section, the phrase "conditions conducive to airframe icing" means visible moisture at or below a static air temperature of 5 °C or a total air temperature of 10 °C, unless the approved Airplane Flight Manual provides another definition.

- (a) When operating in conditions conducive to airframe icing, compliance must be shown with paragraph (a)(1), or (2), or (3) of this section.
- (1) The airplane must be equipped with a certificated primary airframe ice detection system.
- (i) The airframe ice protection system must be activated automatically, or manually by the flightcrew, when

the primary ice detection system indicates activation is necessary.

- (ii) When the airframe ice protection system is activated, any other procedures in the Airplane Flight Manual for operating in icing conditions must be initiated.
- (2) Visual cues of the first sign of ice formation anywhere on the airplane and a certificated advisory airframe ice detection system must be provided.
- (i) The airframe ice protection system must be activated when any of the visual cues are observed or when the advisory airframe ice detection system indicates activation is necessary, whichever occurs first.
- (ii) When the airframe ice protection system is activated, any other procedures in the Airplane Flight Manual for operating in icing conditions must be initiated.
- (3) If the airplane is not equipped to comply with the provisions of paragraph (a)(1) or (2) of this section, then the following apply:
- (i) When operating in conditions conducive to airframe icing, the airframe ice protection system must be activated prior to, and operated during, the following phases of flight:
- (A) Takeoff climb after second segment.
  - (B) En route climb,
  - (C) Go-around climb,
  - (D) Holding,
- (E) Maneuvering for approach and landing, and
- (F) Any other operation at approach or holding airspeeds.
- (ii) During any other phase of flight, the airframe ice protection system must be activated and operated at the first sign of ice formation anywhere on the airplane, unless the Airplane Flight Manual specifies that the airframe ice protection system should not be used or provides other operational instructions.
- (iii) Any additional procedures for operation in conditions conducive to icing specified in the Airplane Flight Manual or in the manual required by §121.133 must be initiated.
- (b) If the procedures specified in paragraph (a)(3)(i) of this section are specifically prohibited in the Airplane Flight Manual, compliance must be

shown with the requirements of paragraph (a)(1) or (2) of this section.

- (c) Procedures necessary for safe operation of the airframe ice protection system must be established and documented in:
- (1) The Airplane Flight Manual for airplanes that comply with paragraph (a)(1) or (2) of this section, or
- (2) The Airplane Flight Manual or in the manual required by §121.133 for airplanes that comply with paragraph (a)(3) of this section.
- (d) Procedures for operation of the airframe ice protection system must include initial activation, operation after initial activation, and deactivation. Procedures for operation after initial activation of the ice protection system must address—
  - (1) Continuous operation,
  - (2) Automatic cycling,
- (3) Manual cycling if the airplane is equipped with an ice detection system that alerts the flightcrew each time the ice protection system must be cycled or
- (4) Manual cycling based on a time interval if the airplane type is not equipped with features necessary to implement (d)(1)–(3) of this section.
- (e) System installations used to comply with paragraph (a)(1) or (a)(2) of this section must be approved through an amended or supplemental type certificate in accordance with part 21 of this chapter.

[Doc. No. FAA-2009-0675, 78 FR 15876, Mar. 13, 2013]

## § 121.323 Instruments and equipment for operations at night.

No person may operate an airplane at night under this part unless it is equipped with the following instruments and equipment in addition to those required by §§121.305 through 121.321 and 121.803:

- (a) Position lights.
- (b) An anti-collision light.
- (c) Two landing lights, except that only one landing light is required for nontransport category airplanes type certificated after December 31, 1964.
- (d) Instrument lights providing enough light to make each required instrument, switch, or similar instrument, easily readable and installed so that the direct rays are shielded from